

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR
DIVISION of AIR POLLUTION CONTROL
PERMIT SECTION

PROJECT SUMMARY for the
PROPOSED TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

Caterpillar, Inc.
Box 348 Route 31
Aurora, Illinois 60507

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I. INTRODUCTION

This source has applied for a renewal of the Title V - Clean Air Act Permit Program (CAAPP) operating permit (I.D. 093 807 AAB, Permit #95120094,) for its existing operation. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by the federal Clean Air Act, as amended in 1990, and 40 CFR Part 70. Unlike state operating permits, the conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A Title V permit contains conditions listing the applicable state and federal air pollution control regulations that apply to a source. The permit conditions also establish emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit.

This renewal permit has been revised to reflect the removal of shot blast equipment, grinders, heat treatment equipment and incinerator with waste heat boilers. The three coal fired boilers have been removed and a natural gas cogeneration facility has been added. The paint booths have been combined to one section instead of three separate sections. Emission units that were incorrectly considered significant emission units, removed from significant sections to the insignificant part of the permit.

II. SOURCE DESCRIPTION INFORMATION

a. Location and Nature of Business

Caterpillar, Inc. is located on Route 31 in Aurora. This source manufactures heavy off-highway equipment for earthmoving activities. Caterpillar's product line consists of large and medium wheel loaders, excavators, compactors and log skidders. The operations at this source include fabrication, welding and assembly. The source receives some parts for assembly and unfinished for fabrication and other operations. During fabrication the parts go through various operations including alkaline cleaning and coating, air drying, drilling, milling, welding, brazing, cutting, pressing into shape and painting of the final product.

b. National Ambient Air Quality Standard Status for this Area

This source is located in an area that is in non-attainment of the National Ambient Air Quality Standards for ozone and attainment for all other pollutants.

c. Major Source Status

The proposed permit is based on:

1. The source requiring a CAAPP permit as a major source of Hap, NO_x SO₂ and VOM emissions.

d. Significant Emission Units

Emission Unit	Description	Date Constructed	Emission Control Equipment
M1332	Touch Up Paint Booth M1332	August, 1980	Paint Booth Filters (For PM Only)
M1884	Top Coat Product Paint Booth M1884 with Drying Oven Rated 1.0mmBtu/hr	After April 14, 1972	Paint Booth Filters (For PM Only)
M3302	Top Coat Product Paint Booth M3302	After April 14, 1972	Paint Booth Filters (For PM Only)
M4703	Touch Up Paint Booth M4703	January, 1980	Paint Booth Filters (For PM Only)
M5794	Touch Up Paint Booth M5794	After April 14, 1972	Paint Booth Filters (For PM Only)
6516	Touch Up Paint Booth 6516	After April 14, 1972	Paint Booth Filters (For PM Only)
CGF	2 Natural Gas Combined Cycle Turbines with Fuel Oil #2 as Backup Rated: 73.41 mmBtu/Hr Each (7MW Each)	August, 2001	None
CGF	2 Natural Gas Duct Burners Rated: 112.2 mmBtu/Hr (Each)	August, 2001	None
CGF	1 #2 Diesel Fuel Emergency Generator Rated: 12 mmBtu/Hr (Peak Load: 1,650 kW)	1989	None
B4	#4 Natural Gas Boiler with No. 2 Fuel Oil Backup Rated: 176.3 mmBtu/Hr	1967	None
B5	#5 Natural Gas Boiler with No. 2 Fuel Oil Backup Rated: 176.3 mmBtu/Hr	1967	None
SRU	Solvent Reclamation Unit	September, 1995	None

Emission Unit	Description	Date Constructed	Emission Control Equipment
GT1	Gasoline Tank #1 12,000 Gallons) with Submerged Loading Pipe	May, 1987	None

III. EMISSIONS INFORMATION

The proposed permit limits the source wide maximum annual emissions from significant emission units at the source. Insignificant activities at this source are not accounted for in the source-wide limit. Further unit specific emission unit limitations are found within Sections 5 and 7 of the proposed permit.

For purposes of fees, the source is allowed the following emissions:

Pollutant	Tons/Year
Volatile Organic Material (VOM)	500
Sulfur Dioxide (SO ₂)	443
Particulate Matter (PM)	115
Nitrogen Oxides (NO _x)	374
HAP, not included in VOM or PM	----
Total	1,432

This proposed permit contains terms and conditions that address the applicability, and, if determined applicable, substantive requirements of Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the proposed permit by T1, T1R, or T1N. Any conditions established in a construction permit [T1] pursuant to Title I and not revised or deleted in this proposed permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new [T1N] or revise [T1R] such conditions in a Title I permit, those conditions are consistent with the information provided in the Title V application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This proposed permit does not establish any new [T1N] requirements or revised [T1R] requirements.

IV. EMISSIONS CONTROL PROGRAMS INFORMATION

a. Emissions Reduction Market System (ERMS)

Because this source is located in the Chicago ozone non-attainment area and emits volatile organic material (VOM), the proposed permit includes conditions to implement the Emissions Reduction Market System (ERMS). The ERMS is a market-based program designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as further described in Section 6.0 of the proposed permit. The proposed permit contains the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS, and identifies units not subject to further reductions.

V. COMPLIANCE ASSURANCE MONITORING (CAM) PLAN INFORMATION

The Compliance Assurance Monitoring (CAM) plan is a program for pollutant-specific emission units which use an add-on control device to achieve compliance with an emission limitation or standard, has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than major source threshold levels, and is not specifically exempt by 40 CFR Part 64. There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

VI. OTHER PERTINENT INFORMATION

a. Risk Management Plan (RMP)

A risk management plan (RMP) is a program required for a source affected by Chemical Accident Prevention for reducing the levels of emissions during an emergency, consistent with safe operating procedures. If the Permittee becomes subject to the RMP then the Permittee would be required to immediately implement the appropriate steps described in this plan should an emergency be declared. The Permittee then would be required to maintain and have this plan on file with the Illinois EPA.

b. Episode Action Plan (EAP)

An episode action plan (EAP) is a program for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Permittee is required to immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared. The Permittee is required to maintain and have this plan on file with the Illinois EPA.

VII. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source.

VIII. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a Title V permit. The Illinois EPA is therefore proposing to issue a Title V permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the proposed permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

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